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2825/4



<b>TRANSMITTAL FORM</b>  <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/040,915
	Filing Date	1/5/02
	First Named Inventor	Steven Teig
	Group Art Unit	2825
	Examiner Name	A. Liu
Total Number of Pages in This Submission		Attorney Docket Number
		SPLX.P0022

Enclosures (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment/Reply  <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declarations(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input checked="" type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Documents  <input type="checkbox"/> Response to Missing Parts/ Incomplete Application  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an application)  <input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input checked="" type="checkbox"/> Other Enclosures (Listed below): <b>Postcard Form 1449</b> <b>88 cited references</b> <b>Credit Card Payment Form</b>
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<b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT</b>		
Firm Or Individual name	Mani Adeli, Reg. No. 39,585 of Stattler Johansen & Adeli LLP	
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PATENT  
Docket No. SPLX.P0022

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Mary Adair

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Steven Teig

Serial No.: 10/040,915

Filing Date: 1/5/02

For: ROUTING METHOD AND  
APPARATUS

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. § 1.97

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, applicants submit with this Information Disclosure Statement the attached Form PTO-1449, and copies of the documents listed in the 1449 form for consideration by the Examiner. The Examiner is requested to make these documents of record. Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

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This Information Disclosure Statement is submitted after receipt of a first Office Action on the merits but before the Final Office Action. Accordingly, a fee is required. The requisite fee is attached.

However, in the unlikely event that the Patent Office determines that additional fees, extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 50-1128 referencing SPLX.P0022. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: November 17, 2003

Respectfully submitted,

By: 

Mani Adeli

Registration No. 39,585

Stattler, Johansen & Adeli LLP  
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Substitute for form 1449A/PTO				Application Number	10/040,915
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	1/5/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	A. Liu
Sheet	1	of	7	Attorney Docket Number	SPLX.P0022

### U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Patent Document Number Kind Code <sup>2</sup> (if known)	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	2001/0009 031	A1	07-19-2001	Nitta et al.
	2.	2002/0182 844	A1	12-05-2002	Igarashi et al.
	3.	2003/0005 399	A1	01-02-2003	Igarashi et al.
	4.	4,593,363		06-03-1986	Burstein et al.
	5.	5,267,176		11-30-1993	Antreich et al.
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	7.	5,587,923		12-24-1996	Wang
	8.	5,618,744		04-08-1997	Suzuki et al.
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	19.	6,070,108		05-30-2000	Andreev et al.
	20.	6,128,767		10-03-2000	Chapman

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	1/5/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	A. Liu
Sheet	2	of	7	Attorney Docket Number	SPLX.P0022

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21.	6,150,193		11-21-2000	Glenn	
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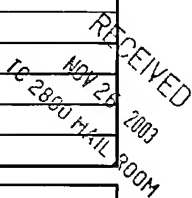
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				<b>Filing Date</b> 1/5/02
				<b>First Named Inventor</b> Steven Teig
				<b>Group Art Unit</b> 2825
				<b>Examiner Name</b> A. Liu
				<b>Attorney Docket Number</b> SPLX.P0022
Sheet	3	of	7	

U.S. PATENT DOCUMENTS					
	44.	6,557,145	B2	04-29-2003	Boyle et al.
	45.	6,567,967	B2	05-20-2003	Greidinger et al.

FOREIGN PATENT DOCUMENTS							
Examiner* Initials	Cite No. <sup>1</sup>	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
		Office <sup>3</sup>	Number <sup>4</sup>				
	46.	JP	411296560	A	Matsumoto et al.	10-29-1999	with English translation of Abstract;
	47.	JP	2000-82743	A	Igarashi et al.	03-21-2000	with Japanese Patent Office's English translation of Abstract; and with English translation of the application. ✓
	48.	JP	H03-173471	A	Tawada et al.	07-26-1991	with Japanese Patent Office's English translation of Abstract; and with English translation of the application. ✓
	49.	JP	H05-243379	A	Masako Kubota	09-21-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application. ✓
	50.	JP	H05-102305	A	Akihiro Sato	04-23-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application. ✓

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Substitute for form 1449A/PTO				Application Number	10/040,915
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	1/5/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	A. Liu
Sheet	4	of	7	Attorney Docket Number	SPLX.P0022

FOREIGN PATENT DOCUMENTS							
						application.	
51.	JP	H07-86407	A	Shinpei Miura	03-31-1995	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
52.	JP	H09-162279	A	Masaaki Yoshida	06-20-1997	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 5 of 7

Application Number	10/040,915
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Group Art Unit	2825
Examiner Name	A. Liu
Attorney Docket Number	SPLX.P0022

**FOREIGN PATENT DOCUMENTS****NON PATENT LITERATURE DOCUMENTS**

Examiner* Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	† <sup>2</sup>
	53.	Ahuja, R. et al., Faster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Machinery, vol. 37, No. 2, April 1990, pp. 213-223.	
	54.	Brady, L. et al., Channel Routing on a 60° Grid, extended abstract, pp. 956-931.	
	55.	Brambilla, A. et al., Statistical Method for the Analysis of Interconnects Delay in Submicrometer Layouts, IEEE, 8/2001, pp. 957-966.	
	56.	Carothers, K., A Method of Measuring Nets Routability for MCM's General Area Routing Problems, 1999, pp. 186-192.	
	57.	Chen, H. et al., Physical Planning of On-Chip Interconnect Architectures, 2002, IEEE, International Conference, pp. 30-35.	
	58.	Cheng, K., Steiner Problem in Octilinear Routing Model, a Thesis Submitted for the Degree of Master of Science, National University Singapore, 1995, pp. 1-122.	
	59.	Chip Model with Wiring Cost Map, August 1983, IBM Technical Disclosure Bulletin, vol. 26, iss. 3A, pp. 929-933.	
	60.	Cong, J. et al., Efficient Heuristics for the Minimum Shortest Path Steiner Arborescence Problem with Applications to VLSI Physical Design, Cadence Design Systems and UCLA Computer Science Department, pp.88-95.	
	61.	Cong, J. et al., Performance-Driven Multi-Layer General Routing for PCB/MCM Designs, UCLA Computer Science Department, 1998, pp. 356-361.	
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	64.	Hom, I. et al., Estimation of the Number of Routing Layers and Total Wirelength in a PCB Through Wiring Distribution Analysis, 1996, pp. 1-6.	
	65.	Hong, X. et al., Performance-Driven Steiner Tree Algorithms for Global Routing, 30 <sup>th</sup> ACM/IEEE Design Automation Conference, 1993, pp. 177-181.	

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 6 of 7

Application Number 10/040,915  
Filing Date 1/5/02  
First Named Inventor Steven Teig  
Group Art Unit 2825  
Examiner Name A. Liu  
Attorney Docket Number SPLX.P0022

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### FOREIGN PATENT DOCUMENTS

- |     |   |
|-----|---|
| 66. | Hu, J. et al., A Timing-Constrained Algorithm for Simultaneous Global Routing of Multiple Nets, IEEE/ACM International Conference on Computer Aided Design. ICCAD - 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA, USA, 5-9 Nov. 2000, pp.99-103. |
| 67. | Kastner, R. et al, Predictable Routing, IEEE/ACM International Conference on Computer Aided Design. ICCAD - 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA, USA, 5-9 Nov. 2000. pp. 110-113.   |
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Sheet	7	of	7	Application Number	10/040,915
				Filing Date	1/5/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	A. Liu
				Attorney Docket Number	SPLX.P0022

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